

I. MATERIALS

- A. THE GROUND ROD SHALL BE A MINIMUM OF 1/2" X 10' COPPERWELD, PORCELAIN PRODUCT #8430; BLACKBURN #5010 OR APPROVED EQUAL.
- B. THE GROUND WIRE TO THE POLE SHALL BE #6 AWG BARE SOLID COPPER.
- C. THE GROUND ROD CLAMP SHALL BE 1/2" COPPER ALLOY, HEX OR SQUARE HEAD SCREW WITH 1/2"-13UNC; JOSLYN #J8591H; BLACKBURN #JAB 1/2H OR APPROVED EQUAL.
- D. THE CRIMP COMPRESSION CONNECTORS SHALL BE COPPER, BURNDY YC2C4 AND YC4C4 OR APPROVED EQUAL.
- E. THE COPPER COMPRESSION TERMINAL LUG SHALL ONE HOLE TYPE TO FIT 1/4" MACHINE BOLT. THE SEAMLESS COPPER TUBING SHALL BE A MINIMUM OF 1" AND BE MARKED FOR #4 CONDUCTOR. THE LUG SHALL BE HOT TIN DIPPED TO PROVIDE CORROSION RESISTANCE AND BE HOMAC L4-14 OR APPROVED EQUAL.
- F. THE FUSE KIT FOR THE PHASE (HOT) WIRE SHALL HAVE A SUPER LAG TYPE FUSE. THE FUSE KIT SHALL BE BUCHANAN 82S-EAFB1-C, OR APPROVED EQUAL. USE KTK-3, OR KLK-3 AMP FUSE FOR LED LUMINAIRE.
- G. THE POLE AND BRACKET WIRE SHALL BE #10AWG COPPER, 7 STRAND, THERMOSETTING CHEMICALLY CROSS-LINKED POLYETHYLENE INSULATION, TYPE XHHW 600V. THE HOT WIRE SHALL BE BLACK AND NEUTRAL SHALL BE WHITE. THE GROUND WIRE SHALL BE GREEN.
- H. THE CABLE GRIP SHALL BE A KELLAM'S CABLE GRIP FOR INSULATED WIRE.
- I. TAPE SHALL BE 1/2" VINYL TAPE. THE TAPE SHALL BE CODED RED OR WHITE, SCOTCH #35, OR APPROVED EQUAL.

II. INSTALLATION

THE STANDARD SHALL BE REMOVED FROM THE OLD FOUNDATION AND PLACED DIRECTLY ON THE NEW CONCRETE FOUNDATION WITH SUFFICIENT CARE AS TO PRESERVE THE EXTERIOR FINISH OF THE POLE AND THE SURFACE OF THE FOUNDATION. THE POLE SHALL BE PLUMBED AND TIGHTENED IN PLACE.

NEW CONNECTOR KITS AND GROUND WIRE SHALL BE INSTALLED AS FOLLOWS:

- A. THE HOT WIRE OF THE CIRCUIT SHALL BE CONNECTED TO THE FUSED CONNECTOR KIT.
- B. THE BARE GROUND WIRE SHALL BE CONNECTED TO THE GROUND ROD AND THE POLE.
- C. THE RISER WIRES SHALL BE RUN THROUGH THE SHAFT TO THE LUMINAIRES.
- D. THE RISER WIRES SHALL BE SUPPORTED BY THE CABLE GRIP NEAR WHERE IT ENTERS THE MAST ARM OR LUMINAIRE.
- E. THE GROUND ROD SHALL BE INSTALLED IN UN-DISTURBED EARTH. TESTING SHALL INDICATE 25 OHMS OR LESS.
- F. TO GROUND A METAL POLE THE BARE GROUND WIRE SHALL BE CONNECTED TO THE GROUND

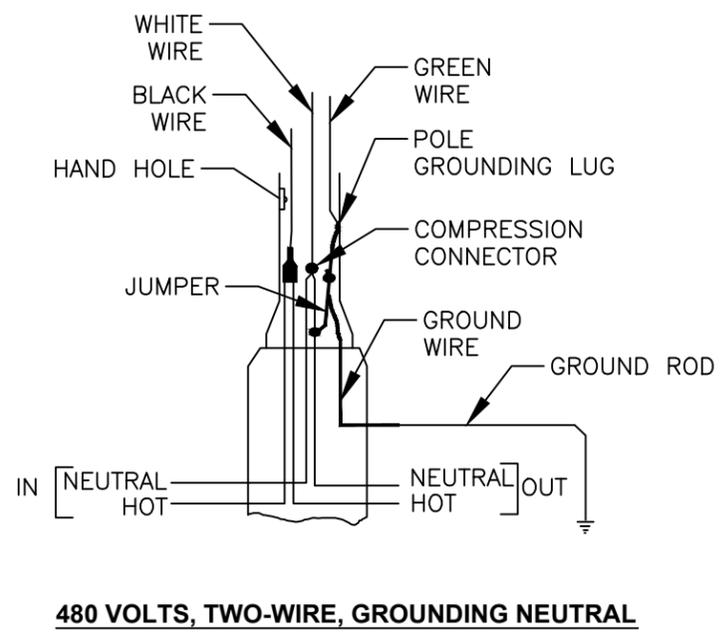
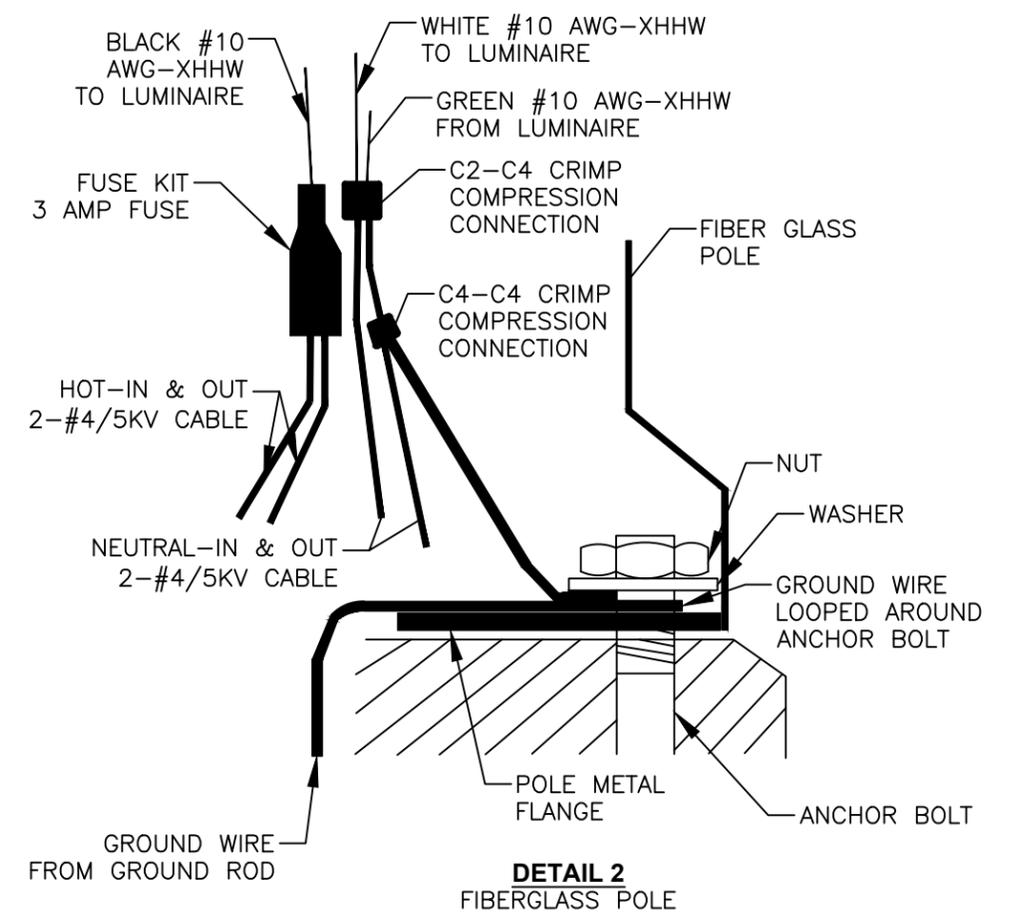
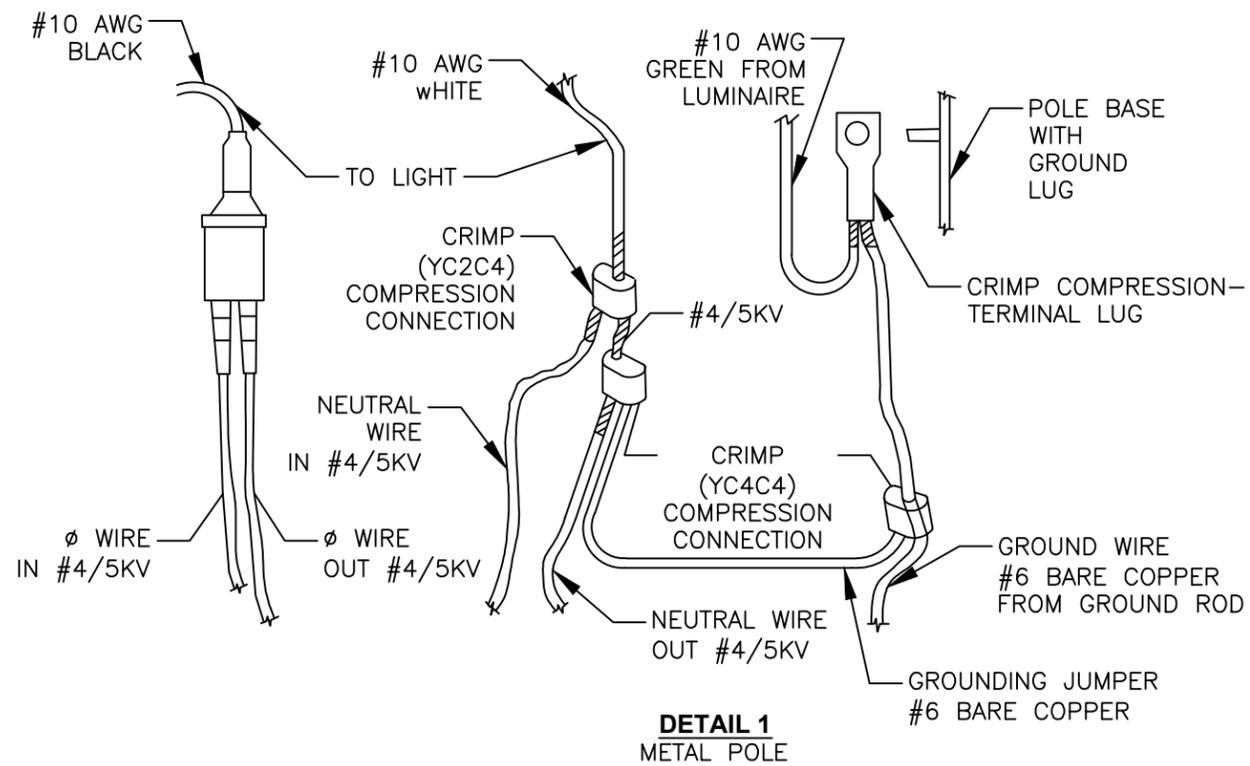
ROD WITH A GROUND ROD CLAMP. THE GROUND WIRE SHALL BE CRIMPED TO THE TERMINAL LUG AND BOLTED TO THE POLE, AND TIGHTENED WITH A NUT AND WASHER UNTIL SECURE. A JUMPER GROUND WIRE SHALL BE CRIMPED TO THE MAIN GROUND WIRE AND BONDED TO THE #4 NEUTRAL (BLACK WITH WHITE TRACER) BY USING A CRIMP CONNECTION. WHITE TAPE SHALL BE WRAPPED AROUND THE #4 NEUTRAL WIRE FIVE (5) TIMES BELOW THE CRIMP. SEE "DETAIL 1".

- G. TO GROUND A FIBERGLASS POLE THE BARE GROUND WIRE SHALL BE CONNECTED TO THE GROUND ROD WITH A GROUND ROD CLAMP. THE GROUND WIRE SHALL BE WRAPPED AROUND AN ANCHOR BOLT AND TIGHTENED WITH THE ANCHOR NUT AND WASHER UNTIL SECURE. SEE "DETAIL 2". A JUMPER GROUND WIRE SHALL BE CRIMPED TO THE MAIN GROUND WIRE AND BONDED TO THE #4 NEUTRAL (BLACK WITH WHITE TRACER) BY USING A CRIMP. WHITE TAPE SHALL BE WRAPPED AROUND THE #4 NEUTRAL WIRE FIVE (5) TIMES BELOW THE CRIMP.
- H. THE #4, PHASE (HOT) WIRE AND THE BLACK, #10 POLE WIRE SHALL BE CONNECTED TO THE TERMINAL BLOCK FUSE KIT. RED TAPE SHALL BE WRAPPED FIVE (5) TIMES AROUND THE HOT WIRE BELOW THE FUSE KIT.
- I. THE #10 BLACK WIRE SHALL RUN FROM THE FUSE KIT THROUGH THE POLE SHAFT TO THE LUMINAIRE.
- J. THE WHITE #10 WIRE SHALL RUN FROM THE COMPRESSION CRIMP OF THE #4 NEUTRAL (BLACK WITH WHITE TRACER) AND THE GROUND WIRE, THROUGH THE POLE SHAFT TO THE LUMINAIRE.
- K. THE GREEN #10 WIRE SHALL RUN FROM THE COMPRESSION CRIMP OF THE #4 NEUTRAL (BLACK WITH WHITE TRACER) AND THE GROUND WIRE, THROUGH THE POLE SHAFT TO THE LUMINAIRE.
- L. THE #10 BLACK, GREEN AND WHITE POLE WIRES SHALL BE SUPPORTED BY THE CABLE GRIP NEAR THE MAST ARM OR LUMINAIRE ENTRANCE.

III. BASIS OF PAYMENT

ITEM	UNIT	DESCRIPTION
MIS-503	EACH	STREET LIGHT RELOCATION, STANDARD

MIS-503	DEPARTMENT OF PUBLIC UTILITIES - DIVISION OF POWER CITY OF COLUMBUS, OHIO		
	STREET LIGHT RELOCATION, STANDARD		
	DRAWN BY: BEN	DATE: 1/1/2018	
	APPROVED: <i>Amy R. Wilf</i>		
SCALE: NONE	SHEET: 1 OF 2	503	



<h1>MIS-503</h1>	DEPARTMENT OF PUBLIC UTILITIES - DIVISION OF POWER CITY OF COLUMBUS, OHIO		
	STREET LIGHT RELOCATION, STANDARD		
	DRAWN BY: BEN	DATE: 1/1/2018	
	APPROVED: <i>[Signature]</i>		
SCALE: NONE	SHEET: 2 OF 2	503	